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Original Communications.

ABSORPTION OF THE HUMERUS AFTER FRACTURE.

Reported to the Boston Society for Medical Improvement, by the various gentlemen under whose observation the case had fallen.

IN 1842, the following case, briefly narrated in the BOSTON MEDICAL AND SURGICAL JOURNAL, of July, 1838, p. 368, was quoted by Costello, in his Cyclopedia of Practical Surgery, as "without parallel in the records of surgery." Its complete history is now for the first time published.

In the autumn of 1819, Mr. C. B., of Boston, at the age of 18, fractured his right humerus near the middle. Subsequently, and before he had recovered entirely, he broke his arm, at the same point, a second time, while holding a plough in the field. A short time afterward, he slipped on the floor, from snow on his feet, and fractured the bone a third time. The last accident was not more than two months from the occurrence of the first. After this final fracture, there was never any tendency to a union of the broken bone, but the humerus began slowly and painlessly to disappear, small fragments of it breaking off, without accompanying inflammation of the soft parts, or any fistulous or suppurating sore, or orifice. The skin of the arm was never broken, and no piece of bone or part of the humerus was ever taken away, or came out unassisted. For four years, Mr. B. did no work, but the process of absorption covered a period of twelve years, at the end of which time the limb had attained a condition in which it permanently remained until the day of his death, at the age of 70 years. This occurred at the Boston Lunatic Hospital, on February 11th, 1871, and was caused by double pneumonia. He had been an inmate of this Institution, at intervals, for four years and three months, but, except in mental condition, was, as he had always been, in excellent general health, with no local affection of his osseous system, except in the arm already alluded to, and capable of a very considerable amount of manual labor, which he willingly and readily performed.

In February, 1847, at the age of 45, Mr. B. was seen and examined by Dr. J. B. S. Jackson, of Boston, who made the following notes of his condition:—

"For the last fifteen years his limb has been about as now. It dangles at the side, and is conspicuously shorter than its fellow. Can feel distinctly a small piece of the humerus, rather irregular and conical, one, or one and a half inches long, and movable on the scapula. Fore-arm shorter by two or three inches than mate. Ulna, seven and three-quarters inches long; upper extremity pointed, and inner edge rather irregular for three or four inches below, as if some absorption had formerly taken place, though the bone feels sufficiently large. Upper extremity of radius is too much buried in the muscles to be felt. Lastly, a bone, about which there is a question whether it is the remains of the lower end of the humerus, or a portion of the ulna, detached and partly absorbed, is found connected with the fore-arm as if by a ligament. It is, perhaps, two inches long; the upper end quite pointed, the lower end comparatively broad; it is, therefore, probably the humerus. Other than this, there is nothing but muscles in place of the humerus; these are well developed, and capable of powerful retraction, and they can be twisted so as to turn the hand entirely round. The hand and fore-arm are sufficiently natural. There is less hair than on the left arm. Writes well with his right hand."

Mr. B. had always expressed the desire that after his death the arm should be dissected and preserved for the benefit of medical science, and this disposal of his limb not being opposed by his relatives, the Warren Museum of the Harvard Medical School

is under obligations to Clement A. Walker, M.D., Superintendent and Physician of the Boston Lunatic Hospital, for having zealously ensured its preservation and careful examination.

The dissection from which the subjoined description has been made was most admirably executed by Professor Thomas Dwight, M.D., who also preserved the specimen by means of glycerine and carbolic acid, so that it still retains the suppleness and appearances of a recent preparation.

The description itself is by C. B. Porter, M.D., Demonstrator of Anatomy in the Medical School of Harvard University.

"All trace of the humerus is obliterated, except its two extremities. The remains of the lower extremity consist of a small, somewhat irregular, pyramidal piece of bone and cartilage, 1½ in. long, ¾ in. wide at its base, its apex pointing upward and somewhat outward. This articulates in a very imperfect way with the radius and ulna, both of whose upper extremities are modified by absorption, and their shafts fused together for their upper third into one slender bone, tapering off in a small and imperfect olecranon. This anchylosis at the upper part of the fore-arm reduces the rotation of the radius on the ulna at the wrist to a very slight motion. The remains of the upper extremity of the humerus consist of a thin, auricular-shaped plate of bone, 2 in. long and one in. wide, in close relation with the glenoid cavity, but presenting no real articular surface. On the outer and upper edge of this piece are inserted the tendons of the supra- and infra-spinatus and teres minor, defining this as the greater tuberosity. Just below this is another bony fragment, 1 in. long, ½ in. wide, slightly concave, into the anterior border of which is inserted the tendon of the pectoralis major. Into the inner and upper border is inserted the tendon of the teres major. The latissimus dorsi, which normally should be inserted with that of the teres major, is inserted, however, into the lower border of the teres major, midway between its origin and insertion. A strong, fibrous band connects it with this last-mentioned fragment of bone. A third piece, a small nodule, 4 lines long by 2 lines wide, is attached to this plate on its upper and internal aspect by a tendinous band; the tendon of the subscapularis muscle is inserted into this nodule, characterizing it thereby as the lesser tuberosity of the humerus. The articular surface of the glenoid cavity is obliterated; the bone itself only slightly if at all modified. The intervening space between the upper and lower fragments of the humerus is occupied by a fibro-muscular mass, about half the normal length of the humerus, judging from the size of the scapula and the length of the fore-arm. This is made up, principally, of the brachialis anticus and the triceps, united closely to each other. The biceps, lying anterior to this, arises and is inserted normally. The deltoid and coraco-brachialis arise normally and are inserted, the former into the outer, the latter into the anterior surface of the mass described. The scapular head of the triceps arises normally; the other two heads are blended in this central mass, which gives origin, also, to the brachialis anticus in front. These two muscles, as they approach the elbow-joint, surround the remains of the lower end of the humerus and pass onward to become blended with the origins of the extensor and flexor muscles of the fore-arm, with no definite point of insertion. The supinator longus and the flexor carpi radialis longior take origin from the fibro-muscular mass. The humeral origin of the remaining muscles of the fore-arm is blended with the insertion of the muscles of the arm. All the bony prominences at the elbow-joint are so modified and absorbed as to bear no resemblance to the properly-developed bones. The muscles thus described, although somewhat fatty and atrophied, still present a very fair amount of development, and are well defined and readily distinguished and separated from each other."

The arteries, veins and nerves are not preserved in connection with the muscles, but at the time of the dissection a careful examination revealed no traces of a departure in them from an apparently natural and healthy condition.

The serviceableness of this remarkable limb has been already alluded to. Prof. S. D. Gross says in his Surgery (vol. i. p. 882, 4th Ed.), that he saw Mr. B. in 1856, and gives a wood-cut of the arm as it appeared when the muscles were contracted. It was then essentially in the same condition as at the time of the patient's death. Dr. Gross states that it could readily raise a weight of one hundred pounds, and Dr. Jackson observes that he has often seen Mr. B. carrying a heavy basket of provisions with it. But the following account, by Mr. W. E. Mosely, Resident House Pupil at the Lunatic Hospital, gives an interesting and detailed account of its capacity for work.

"Mr. B.," he says, "could hoe, rake, shovel, sweep, cut wood, carry a large pail of water, hold a knife at the grind-

stone, and write a good hand. (He used to write letters for other patients.) He took care of his own room and made his own bed. By twisting the upper part of his arm, he could use his fingers well enough to tie his neck-handkerchief. One of his amusements seems to have been to twist his arm once and a half around in one direction, and then, taking up a pail of water, to let it untwist and twist once and a half round in the other direction. He could not flex the fore-arm upon the upper arm at will, nor could he extend the fore-arm when flexed, unless in a position in which the weight of the arm would make it drop. The muscular power of the arm was very considerable."

In bringing the facts of this exceptional case into their proper order, the compiler has looked in vain for information bearing upon its phenomena. That, under some circumstances, the callus of a recent fracture may disappear, and an imperfect, or complete want of consolidation ensue, is a recognized occurrence; but that such a process should go on, involve nearly the whole humerus, and, to a certain extent, bones in relation with it, is, so far as known, without precedent in the books, or (not forgetting the progressive atrophy of the muscles) in the analogy of similar occurrences in other tissues than the bones. That this arrest of nutrition had anything to do with a local condition of the parts, or with the treatment of the fracture, does not appear. The changes which sometimes take place in the articulating extremities of bones in certain cases of locomotor ataxia are, perhaps, to be remembered in this connection, though nothing suggestive of that, or some similar disease, so far as Mr. B.'s general health was concerned, was ever noticed, beyond a disturbance of the nervous centres, leading to an insanity of the form termed "Chronic Circular Mania," characterized by alternations of extreme depression and excitement, the intervals between which varied from nine to twelve months.

Dr. Felix von Niemeyer's large and valuable library has, since his death, been bought by Albert Moses, a bookseller of Tübingen. He has carefully catalogued it, arranging it with the same headings as are found in the "Practice" of Niemeyer. He thus offers members of the profession an opportunity to rescue the whole or part of the library once belonging to this great master in medicine.

COLLOID DISEASE OF ALMOST THE ENTIRE STOMACH, WITH VERY UNUSUAL SYMPTOMS.

Communicated to the Boston Society for Medical Improvement by Dr. D. H. Storer, June 24th, 1872.

Mr. E., a merchant of this city, was 68 years of age at the time of his death, which occurred in May, 1871. From the time that he was a young man he had been occasionally troubled by his food, had always been constipated, and for the last few years quite so. Four or five years before his death, I saw him for the first time, and found a very marked tumor below the right hypochondrium, with a considerable sense of uneasiness there, and which he had had for some years. Mr. E. afterwards spent four months in Europe, and during that time was not sick for a day—his weight then being 147 lbs. During the greater part of the summer of 1870, he was at his country-seat in Pepperell, and enjoyed himself highly; but from that time he gave up business, lost flesh, and in the autumn had extensive dropsy of the lower extremities. On the 22d of February, he had a faint turn on stooping, was less well afterwards, and never again had on his clothes. He had a yellowish, sallow look, and his eyes were occasionally yellow, but the color of his discharges was natural. From September, 1870, there was great enlargement in the epigastric region, and from that time there was a prominent, hard tumor, over which the skin was tightly drawn, but it was not particularly tender on pressure. His appetite was good until the last, and he took meat the day before his death, with relish; mutton chop and oysters he would take at the same meal, and pig's feet he often took. He also continued to smoke, though not daily. He was very fond of grapes, and would often take a pound daily. After August, 1870, he never took his meals at the table, as he suffered from dysphagia, with a sense of obstruction and a "tearing feeling" in the œsophagus. There was no acidity, flatulence or heart-burn. Notwithstanding his appetite, he had nausea most of the time from August, 1870, until his death, and without any regard to the taking of food, but he had no retching. During the summer of 1870, he vomited, twice, a colorless mucus in trifling amount, and not long before his death he vomited after taking castor oil, and these, so far as Mrs. E. can remember, are the only times that he ever did vomit. Towards the last, with a desperate hope of relief, he put him-

self under the care of a heroic practitioner, and after a severe course of purgatives, sank.

On dissection, by Dr. Ellis, the stomach was found to be very greatly enlarged, and on being cut open along the large curvature, the whole organ was seen to be affected with colloid disease, except at the left extremity, where, to the extent of about an inch, the tissues were nearly or quite healthy. The appearances along the cut surface were remarkably uniform, the parietes being seven-eighths of an inch in thickness toward the pyloric portion, and gradually diminishing to their natural thickness at the left extremity. In structure they consisted of the most perfectly characterized colloid, without a trace of the mucous, sub-mucous, cellular or muscular tissues, though the remains of the sub-serous cellular were traceable throughout. As the function of digestion was so remarkably performed, and to the very last, a microscopical examination of a small portion of the organ was made by Dr. Fitz, after it had been for some time in spirit, but no normal glands were found. The disease extended a short distance into the œsophagus, but stopped abruptly at the pylorus. The omentum was extensively diseased, and near the stomach was a mass of the most perfect colloid, between one or two inches in thickness. Upon the surface of the liver there was one small nodule of the same, and many small ones were scattered over the peritoneal surface, but elsewhere there was no trace of the disease. The kidneys, however, were granular, and there was a large amount of serum in the peritoneal cavity.

It seems almost incredible that this individual should have been able to enjoy and digest his food, when such disorganization of the stomach must have existed for no inconsiderable period.

Dr. E. H. Clarke saw Mr. E., September 26th, 1870, and the following statements are from notes that he took at the time :—

Generally healthy until three years ago, and then some acute disease in the lower part of the abdomen; fair health afterward until nine or ten months ago, and then hepatic symptoms; tumor hard and irregular, and considerably more marked upon the left of median line than right, greater tenderness being near the ensiform cartilage.

December 14th, he saw him a second time, and found the tumor more distinct in the middle of the abdomen, less below the left ribs, and evident to the eye as well as to the touch.

Dr. S. W. Fletcher, of Pepperell, says, in a written account of Mr. E.'s case, that he first saw him in October, 1869, and there was then some uneasiness, with occasional pain in the stomach. In April, 1870, the pain, with soreness, continued, and there was distress after some kinds of food. There was, also, on deep pressure, just beneath the cartilages of the ribs and a little to the left of the median line, a feeling of firmness, with dulness on percussion. From this time until the 22d of September, when he returned to Boston, the tumor increased, and for the pain he was obliged to take the sulphate of morphine several times daily. About the middle of August, he vomited a little glairy mucus in the morning, and the same early in September, but at no other time, so far as Dr. F. heard. He had slight nausea, however, occasionally, but he complained mostly of pain and distress, and often within half an hour after taking food. In September, the tumor was quite prominent, reaching nearly to the umbilicus, almost across the epigastric region to the right, and towards the left side just into the hypochondriac region. The liver could be felt, but the case was regarded by Dr. F. as one of disease of the stomach.

On Thoracentesis.—Dr. Clifford Allbutt (*The Practitioner*, Aug., 1872) urges early puncture of the thorax in cases of pleuritic effusion. He thinks that nothing approaching the *promptitude* of the relief which in such cases is afforded by thoracentesis can be attained by medicine. He states that if he finds any large amount of fluid in the pleura of a patient he now never tries medicine at all, unless the friends or the family attendant urge such a course; for in his records of cases treated by drugs, and in such records as he has of cases so treated by others, the results are very far inferior to those in which puncture has been employed. He cites the case of an old gentleman who had gone about for many months with his left pleura nearly full of fluid, and who had been treated with mercurials, digitalis, iodides, tonics, and good nutrients, but in vain. In the end the fluid subsided in considerable measure, but chronic pneumonia supervened in the injured lung, and he ultimately died. "I have no reasonable doubt," he states, "that his life could have been spared, and his health quickly restored, had he been tapped at the beginning."

Progress in Medicine.

REPORT ON OTOLOGY.

By J. Orne Green, M.D.

[Concluded from page 236.]

On the relation of conical incisor teeth, and of pannus of the cornea, to the development of deafness.—A. D. Davidson. (*Ann. d' Ocul.* lxv.)

The author directed his attention to the relation which pannous keratitis bears to deafness, and the peculiar shape of the teeth, (Hutchinson's teeth).

Most of the patients with these three symptoms were from 11 to 16 years of age, generally poorly nourished and unhealthy, and what is more remarkable, all of them were females.

The disease in the ears consisted of an affection of the Eustachian tube alone, or more frequently associated with an inflammation of the membrana tympani and the lining of the meatus. In its earlier stages, the membrana tympani is red, becomes gradually paler as the disease progresses, but remains thickened and loses its elasticity. The hyperæmia of the mucous membrane of the Eustachian tube results finally in chronic swelling and closure of the canal. The prognosis is very unfavorable, for when the disease has once produced a thickening of the membrana tympani, a restoration of the hearing is very doubtful. An improvement can only be expected when the general health can be restored.

The relation of these three symptoms to syphilis, is not wholly denied by the author, but he says that in only 20 per cent. of his cases was he able to establish such a connection.

The connection of interstitial keratitis and conical teeth has been sufficiently established, but attention is here first called to its association with disease of the ears. Some years since Hinton, in Guy's Hospital Reports, described a form of deafness which he had seen quite frequently in syphilitic persons, and especially in children with hereditary syphilis; he considered it a form of disease of the labyrinth dependent on the general disease, coming on rapidly, without visible changes in the ear, and resulting, often within a few days, in total deafness. Treatment, either local or general, he found absolutely useless.

In 1870, Gruber published (*Wiener Med. Presse*) an article on the syphilitic affections of the ear, in which he stated that the mucous membrane of the middle ear was especially liable to disease on account of its connection with the throat and nose; the hypertrophic form of inflammation he considered particularly common in this membrane in syphilis. No mention is made, however, by him of any characteristic appearances different from those seen in persons without the general disease, nor does he mention any peculiarity of the ear disease in cases of hereditary syphilis. In regard to treatment, he cautions against trusting to remove the diseases of the ear by treating the constitutional affection only, considering a local, combined with the constitutional treatment, as necessary to obtain the best result.

During the last year I noticed a somewhat peculiar appearance in the ears in connection with interstitial keratitis, and in a clinical lecture at the hospital called attention to it. I can recall but three cases, two girls and one boy—although I may have seen one or two more—but, in all, the appearances were nearly the same, and quite characteristic on the membrana tympani, this membrane being dull and infiltrated, and recalling immediately the appearance seen on the cornea, with its little spots of thickened intestitial tissue. The opacity of the membrane appeared different from that usually seen with the common inflammation of the mucous membrane; with this appearance there was more or less congestion along the manubrium of the hammer, and on the walls of the osseous meatus; in all, the pharynx was inflamed, and the Eustachian tubes swollen; the deafness was considerable in two, and in the boy, so extreme that he could only understand words shouted into his ear. In two, hereditary syphilis was almost certain; in regard to the other nothing could be learned. The treatment consisted in general tonic and specific medication, with a local treatment of the ears by the air-douche, and applications to the pharynx. In the two cases which I was able to follow, the result was a decided improvement in the hearing, and a disappearance of the inflammation, although a much greater degree of deafness remained than would be expected from a simple catarrhal inflammation of corresponding severity and duration at that age. The only case seen after treatment has remained without relapse nearly a year, and seems to be still improving. In the case of the boy, iodide of potassium had been given for some time before I saw him, without the least effect on the ear-disease, and I am un-

able to speak of the final result, as I saw him but three times. After the reduction of the congestion the appearances were the common ones of plastic inflammation, and I regarded the disease as belonging to this class, its peculiarities being the appearances in the membrana tympani, and the rapidity with which thickening came on.

Davidson appears not to have noticed anything unusual in the membrana tympani, but otherwise the appearances in his cases resemble those in mine. I am led, however, from my experience in these few cases, to expect more from local treatment than he does, although I doubt if a complete restoration would ever be possible after this inflammation. The thickening of the mucous membrane goes on very rapidly, and the duration of the disease must have great influence in forming the prognosis.

On the Existence of Blue Otorrhœas.—Zaufal (*Archiv. f. Ohrenheilk.* vol. vi. p. 3). The recent discussions on the pathogenic relation of the smaller organisms to infectious diseases, gives an interest to this contribution of Zaufal's. The phenomenon of "blue pus" he speaks of as not very uncommon on bandages and compresses over wounds, but till recently he had never seen it in otorrhœa.

All matter colored in this way had been found to contain minute bodies, which Lücke and Krembs considered to be of an animal nature, while Sedillot and Roucher thought that they were vegetable. Petrequin thought that the color was due to sulphate of iron, and Virchow that it was a blue coloring matter from the urine. Lücke observed undoubted voluntary movement in these bodies, and considered them vibros, different, however, from the vibrio-cyanogenus of milk; he found that serum and not pus was necessary for their existence, and considered that the blue color of the pus depended upon them. If some of them in a bandage were placed on suppurating or moist wounds, where from the warmth of the body, moisture and albuminous nourishment they could rapidly increase, the bandage assumed an intense, blue color; light and air did not seem necessary for their development; the appearance and disappearance of the blue color was spontaneous; it was usually found on the first bandage, or in cases where the discharge was serous; profuse suppuration was unfavorable to its development; its existence had no influence on the healing of the wound; its inoculation was generally successful.

The coloring matter has been separated by Fordos, and named pyocyanin; it chrystallizes from a chloroform solution in blue or green needles, and has the reaction of lakmus.

Prof. Ferdinand Cohn, in his studies on the relation of bacteria to putrefaction and to contagion (Feb. 14, 1872), concludes that all putrefaction is accompanied by the development of bacteria, which appear when putrefaction begins and disappear when it ceases;

The transportation of the eggs through the air is difficult, but through water or through contact with unclean surfaces, very easy;

Putrefaction is a decomposition of the albuminous compounds by means of bacteria, in the same way that alchoholic fermentation is a decomposition of the sugar by means of the yeast plant;

In certain classes of bacteria these products are characterized by being colored orange, green, blue, brown or violet;

The appearance of bacteria in the blood and secretions of contagious diseases, renders it probable that they are the bearers of the infection, and the exciters of the pathological process;

The transferring of the bacteria seems to take place chiefly through water.

Zaufal, from this review of the literature of the subject, does not consider that the conditions necessary for the development of blue pus are as yet understood, nor does he even think it settled that the animalcules are the cause of the blue color, since we see it appear and disappear on wounds without appreciable cause.

The two cases of otorrhœa in which he observed it, were lying in the same ward with similar otorrhœas, all of them using water from the same source, and similar lint. Both of the cases were purulent inflammations of the tympanum without abundant secretion. Fibres of lint soaked in blue pus were applied to five other cases of otorrhœa with the result of perfect inoculation, the secretion in these cases becoming also of an intense blue in from 24 to 48 hours. An examination of the secretion showed masses of bacteria such as had been described in other wounds. In three of the five cases an inflammation of the meatus appeared simultaneously with the blue pus, but otherwise the inoculation had no influence on the course of the disease.*

* Writers of papers on Otology will contribute much assistance in the preparation of the semi-annual reports in this department if they will forward copies of their papers, addressed to this Journal.—Eds.

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED FOR THE JOURNAL.

The Society resumed its meetings after the summer intermission, Saturday evening, Sept. 28th. The President, Dr. Lyman, occupied the chair.

Dr. Fitz exhibited a fœtus which had been sent to him by Dr. Norris of Cambridge. It presented an ectopia cordis; the heart was lying entirely outside the walls of the thorax, suspended in its place by the attachments of the large vessels. The pericardium was to be observed posteriorly but not anteriorly.

The child lived ten minutes after delivery, the pulsations of the displaced heart continuing that period.

Besides this abnormality of the heart, there was a double hare-lip deformity.

Dr. Jackson remarked that specimens of ectopia cordis were preserved in the foreign pathological museums, but, so far as he knew, this was the first instance of the kind reported in this vicinity.

Dr. Jackson exhibited a photograph of a collection of needles, three hundred in number, which had been removed from the body of an insane woman at the asylum in Utica, N. Y. The case was fully reported some time since in the *Journal of Insanity*. There was no history of her having introduced the needles into her body before her entrance to the hospital, and no performance of that kind was observed while she was there, but a few weeks after admission an inflammation of the breast developed, and at the place of pointing of the pus a needle was discharged, the first of the three hundred from various parts of the body, the limbs, the abdominal walls, the mammæ, &c.

Dr. Jackson also showed a collection of needles which had a history similar to those just described. They were removed from the body of a negro woman of Nantucket, some years ago; no cause for the freak of their introduction having been assigned.

Dr. Jackson presented a specimen of relaxation of the ligaments of the symphysis pubis. It was taken from the body of a woman who died of meningeal apoplexy, under the care of the late Dr. Townsend, at the full period of gestation, but before labor had commenced. The ligaments of the pubes were relaxed to such a degree that the two bones could be made almost to overlap; the anterior border of one resting on the posterior border of the other.

The symptoms referable to this condition during life, had been a lameness and a feeling as of loss of pelvic support, so that it was necessary to rest in going up stairs. The patient had had one child previously, and the same lameness occurred at that time, suggesting a similar state in connection with that gestation.

Dr. Jackson said he did not think these cases of ligamentous relaxation about the pelvis so rare and exceptional as was supposed; he himself had seen quite a number of specimens more or less marked. It was probable, however, that it was a condition not readily recognized during life, except in cases which were well developed.

Dr. Lyman remarked that he had had two cases of the kind under his observation; one of them was quite marked. In this latter case, there were some obscure symptoms before labor which might readily be explained by the conditions peculiar to the last stage of pregnancy, particularly the lameness. After labor, however, the state of relaxation became easily recognized. The inability to walk was increased, and became so serious that it was only by the use of a band or strap, firmly applied, that locomotion became comfortable. The ossa pubis could be felt by the patient and by himself to move one upon the other. Gradual recovery followed.

Dr. Jackson illustrated the subject in point, by showing the pelvis of a Guinea-pig, the pubic bones of which were separated a third of an inch in consequence of parturition; and, also, that of a mouse, the symphysis pubis of which showed marked separation in connection with a condition of advanced pregnancy.

Dr. Bixby exhibited a collection of ten urinary calculi, removed from the bladder of a woman in whom they had given rise to symptoms, variously severe, during a period of twelve years. The patient had an hereditary predisposition to stone. The operation for removal consisted in the dilatation of the urethra by means of spongetents, and the extraction of calculi, eleven in number, after full dilatation. Immediate relief resulted from the operation.

Dr. B. Joy Jeffries read a paper entitled "The Re-introduction of Ether into England." The paper appeared in the Journal for Oct. 3d.

Dr. Sinclair read from an old medical work of the last century a curious account of the passage, from the rectum of an adult man, of a worm one foot and a half long,

and one inch and a half in diameter, composed of segments and containing blood. Its color was dark chocolate, and its head contained a mouth like that of a horse-leech. The passage of this parasite gave rise to much hæmorrhage from the bowels.

Bibliographical Notices.

The Pathology of the Teeth, with special reference to their Anatomy and Physiology. By Carl Wedl, M.D., Professor of Histology in the University of Vienna, &c. Translated from the German, by W. E. Boardman, M.D. With notes by T. B. Hitchcock, M.D., D.M.D., Professor of Dental Pathology and Therapeutics in Harvard University, &c. With one hundred and five Illustrations. Philadelphia: Lindsay & Blakiston. 1872. Pp. 470.

Up to the present time, dental pathology has had but a feeble existence; numerous facts existed, but they were scattered in all directions, isolated and in groups. Those interested in dentistry, with but few exceptions, devoted themselves almost exclusively to the practical details of the subject, thereby creating the art of the most immediate importance, while the science held a sort of ideal existence. But this is now placed on a firm basis, mainly through the efforts of Prof. Wedl.

Two years ago, the German edition of this work was issued, closely following the publication of the "Atlas of the Pathology of the Teeth, by Heider and Wedl," to which numerous references are made in the volume now before us.

Some seventy pages are devoted to the anatomy and physiology of the teeth, by way of introduction, and a more thorough and accurate exposition could hardly be desired. Throughout this section, as throughout the entire book, the reader is continually impressed with the immense amount of original work which the author has bestowed upon his subject. The matter of the development of the teeth is especially interesting, illustrated as it is by most admirable drawings.

In speaking of the shedding of teeth, Wedl calls attention to appearances indicating an interstitial absorption, the formation of gaps in the cement, which become filled with amorphous calcareous salts. The tissue most active in the destruction of the cement is described as a granulation tissue, often containing a varying number of giant-cells, and is probably developed from the root-membrane of the milk tooth and from the medulla of the adjacent osseous tissue. Where this is in contact with the fang, depressions are produced, similar to those seen upon necrosed bone and ivory plugs which have been introduced into living bone. Wedl thinks that the cells of the granulation tissue secrete a fluid which dissolves the hard substance.

With regard to the possibility of a third dentition, no individual testimony is given, though the theoretical possibility of such an occurrence is admitted, on the ground that germs may lie dormant for a number of years and then develope, favorable conditions being present. Still, the weight of evidence seems to favor the explanation of a third dentition as due to the appearance of previously imbedded teeth, or parts of teeth, the surrounding bony walls having undergone senile absorption.

The bulk of the volume is devoted to the pathology of the teeth, and for greater convenience as well as for more exact classification, the various possible alterations are grouped under Irregularities in Formation, Inflammations, Atrophies, Hypertrophies, New Formations, Anomalies of the Secretions and Neuroses.

Following Albrecht, Wedl disputes the statement of Hutchinson with regard to the appearance of the teeth in congenital syphilis. Dr. Hitchcock, who annotates the American edition, very ably answers Albrecht's objections, calling attention to the observations of Dr. H. W. Williams, and introducing the plates prepared by the latter.

To the general physician, it may be interesting to learn that so high an authority as Wedl is inclined to attach considerable importance to the causative influence of teething in producing affections of the nervous system, intestinal tract, respiratory organs, &c. Influenced by the observations of others, he states that "inflammations of the gums during the eruption of the milk teeth are to be watched with the greatest care, and we must not assent to nihilistic doctrine (nihilismus) in respect to the influence of difficult teething upon the infantile organism," and he raises the hope that some one may establish "an anatomical basis for abnormal dentition, by its pathologico-anatomical study."

Among the curiosities of medical experience, of especial interest to the surgeon, may be mentioned the case reported by Prof. Strasky. An ulcer had existed on

the left side of the chest, opposite the armpit, near the fourth rib, for three years, during which time the patient had been under treatment for the same. Pressure applied from the angle of the jaw downwards along the surface of the neck to the region of the ulcer, caused pus to escape from its surface. The removal of the carious left lower wisdom-tooth was followed in three weeks by the healing of the ulcer.

With regard to the disputed point of the possibility of the existence of a healed fracture of a tooth, Wedl is able to give direct evidence, and figures two such cases in his Atlas. The reparative process commenced in the pulp, and dentine, globular masses and bone were reproduced.

The chapter on new formations will prove of interest to the surgeon, since a very complete exposition of the subject of maxillary tumors is to be found under this head.

The statement of Dr. Bowditch, that the presence of vegetable or animal parasites in the immediate vicinity of the teeth is due to uncleanliness, is denied by Wedl as regards the leptothrix, which may make its appearance under certain conditions even when the utmost cleanliness exists.

That tartar is composed of collections of vibrios encased in a coating of lime is disputed; an organic cement, of mucus, epithelium, mixed saliva and leptothrix, unites with the inorganic salts precipitated from the saliva, hence the incrustation.

In discussing caries, Prof. Wedl regards the process as the result of abnormal secretion, at the same time acknowledging that his theory with regard to the same, like all others, wants a thoroughly scientific basis. "In consequence of the decomposition of the secretions, acids are formed which extract the calcareous salts from the hard tissues and give rise to a disintegration of the affected portions of the latter, in which no inflammatory reaction occurs. The destructive process is promoted, essentially, by the accumulations of secretions and particles of food, and opportunity is afforded for the proliferation of leptothrix buccalis, in the dead and softened dentine."

Wedl's Pathology of the Teeth must serve as authority for many years to come. Teaching methods of observation and analysis, it also points out fields which will prove fertile to future research. To the dental student a knowledge of its contents becomes a necessity; as a book of reference, the medical practitioner, surgeon as well as physician, will have frequent occasion to consult its pages. Among the many works of special investigation which Germany has given us of late years, this will hold high rank for originality, comprehensiveness and execution.

Dr. Boardman deserves special praise for the results of his skill and labor. Apart from the difficulty of rendering idioms exactly, many of the terms used have a limited meaning only to be got at by careful study, and the translation furnishes a very readable description of processes, often somewhat difficult to follow in the original. He has conferred a great favor, too, on all who consult this work by enlarging the index from three pages to twenty-five, thereby increasing the usefulness of the volume to a considerable degree.

Prof. Hitchcock pays the greatest possible compliment to the author in finding it necessary to add but few notes; these, however, are well-selected and give additional light.

The publishers are to be congratulated upon the appearance of the book. Paper and print are excellent, the illustrations sharp and clear, produced from the original electrotypes. F.

Epidemic Cerebro-spinal Meningitis; with an Appendix on some Points on the Causes of the Disease, as shown by the History of the present Epidemic in the City of New York. By MEREDITH CLYMER, M.D. (Univ. Penn.), &c. &c. Philadelphia: Lindsay & Blakiston. 1872. Pp. 59.

THIS sketch is reprinted, with a few corrections, from the author's additions to the American Edition of Dr. Aitken's *Science and Practice of Medicine.* The occasion of its re-publication is the prevalence of the disease in New York City. The present epidemic is described in an Appendix, and an interesting map of the city has been added, which gives the situation of the ancient water-courses and marshy lands, and indicates by a red spot the place where each death occurred. From this map we infer that Fourth, Fifth and Madison Avenues are highly unobjectionable places of residence—at least as far as the epidemic in question is concerned—while the rest of the city is more or less covered with tokens of "spotted fever," distributed most densely in the crowded quarters. The disease made its appearance about the beginning of the present year; during the first six months the number of reported cases was 790; of deaths, 607. In July there were 70 deaths.

If not originally caused by filth, accumu-

lation of refuse, poor drainage, and bad ventilation, there can be no doubt that the disease owes its diffusion in three cases out of four to such circumstances. It is positively sickening to read the reports of the abominably foul places where it occurred. It would be equally nauseous to report the exact condition of many a poor man's tenement in Boston, such as we have seen. Prof. Clymer's little pamphlet is very welcome just now in a city which is trying to get what it wants—a Board of Health. Shall our Philadelphia friend put in a second Appendix, next year, with an account of the epidemic in Boston in 1873? D. F. L.

A Treatise on the Diseases of Infancy and Childhood. Second Edition. By J. Lewis Smith, M.D., &c. Philadelphia: H. C. Lea. 1872. Pp. 741.

We took pleasure three years ago, in calling the attention of the profession to an excellent work on children's diseases, by Dr. Smith; and now we find before us the second edition of the same book. On looking over its pages we find that nearly twenty diseases have been treated, which were unmentioned in the former edition; new formulæ have been added, and portions of the work have been re-written, either for the purpose of better arrangement, or in order to keep up with the advance of medical science.

Altogether the book is a thoroughly reliable one; it is pleasantly and clearly written, and will rank with the best works on the interesting subject of which it treats.

How the World was Peopled. Ethnological Lectures by Rev. Edward Fontaine. New York: D. Appleton & Co. 1872. Pp. 341.

The ideas arrived at by the author of this book, have been reached after a careful study for many years, and by diligent comparison made by him in theology, archæology and natural science. The conviction which he reaches is that commonly understood by the readers of the Bible, that all the inhabitants of the earth are derived from one original pair of parents. The subjects of evolution and natural selection, of unity or plurality of the human species, of the probable presence of human remains, of the age of the world and of the human race, whether we estimate it by centuries or by æons, have long tasked the minds of the profoundest philosophers; they are themes of the highest importance, and are worthy to engage the attention of all. Mr. Fontaine's book treats of the arguments which have fixed his mind in the belief that we are all descended from a single pair, and it is written for those who are anxious to clear their minds about their origin. He has adopted a simple and intelligible style of composition, and his work is both interesting and valuable to the common, as well as the more scientific reader.

On Food: being the substance of four Cantor Lectures. By H. Letheby, M.B., M.A., Ph.D., &c. Second Edition, enlarged and improved. Pp. 255. New York: William Wood & Co. 1872.

The four lectures of which this book is composed, treat of food with reference to its varieties, chemical composition, nutritive value, comparative digestibility, physiological functions and use, preparation, culinary treatment, preservation, adulteration, &c. Each one of these divisions is considered at length, and many practical hints are thrown out during their discussion.

Some curious statements are made, as the following:—The writer when speaking of Indian meal says (p. 16), "The grain is said to cause disease when eaten for a long time, and without other meal—the symptoms being a scaly eruption upon the hands, great prostration of the vital powers, and death after a year or so, with extreme emaciation. The sallow, wheezen look of the natives of the northern states of America, is thought to be due to the indigestible preparations of Indian corn."

Lecture II. contains a succinct, yet clear account of the more recent facts and theories concerning the function of digestion, and discusses also the effects of different varieties of food in the formation of the character and capabilities of the inhabitants of different countries.

The book has much that is interesting concerning ancient customs regarding the subject under consideration:—e. g., pp. 128 and 129, on ancient habits of dining.

This book may be recommended to those who desire to possess a brief yet quite thorough treatise on the subject indicated by the title.

Mr. Airy, Astronomer Royal of England and President of the Royal Society of London, has been elected foreign associate of the French Academy of Sciences.

Medical and Surgical Journal.

Boston: Thursday, October 10, 1872.

HEAR THE OTHER SIDE.

In marked contrast with the tenor of the remarks of Dr. Amory at the July meeting of the Norfolk District Medical Society (see this Journal, page 238), we would call attention to the following.

An Editorial of the *Medical Times and Gazette* of Sept. 7th, 1872, on Medicine and Physiology, is suggested by the address of Dr. Burdon-Sanderson at the recent meeting of the British Medical Association. In the course of his remarks, the lecturer intimated that it is the aim and intention of the physiological school of thought and work to separate themselves more and more from the school of practical medicine.

We quote at length from the editorial, which advocates the superior claims which experience and empiricism have upon practical medicine.

"As it is, we think we may look at the line which the physiologists are taking without any dismay. We would not for one moment be supposed to underrate the services of physiology to medicine. The great discovery of the circulation of the blood; the ascertained facts in relation to absorption, secretion, nutrition; the functions of the brain and nerves and respiration; the microscopic appearances of the tissues and products of the human body in health and disease—are all parts of the very foundations of modern medicine. But when we come to examine into the influence of physiological theories—the opinions of physiologists, based, it may be, on experiments on the lower animals in unnatural conditions, or upon theories of health and disease, derived from the study of the former rather than of the latter—we believe that we shall find that such influence has been by no means an unmixed benefit.

"It is the fact that the teaching of experience is more reliable than physiological theories and opinions—which we think is especially taught by the history of modern medicine. The history of the advance of the cure of disease is the history of empiricism in the best sense of that much-abused word. The history of retrogression in the art of curing disease is that of the so-called physiological schools of medicine. The school of physiological medicine, of which the late Dr. Todd may be considered the representative, introduced, in opposition to all accumulated experienee, that routine practice of over-stimulation in acute disease from which the profession is only now freeing itself. Physiological theory has been one great agent in practically depriving us of the most powerful of our weapons for the subjugation of disease—the abstraction of blood under suitable conditions. Physiological theory, based on experiments on dogs, wishes us to believe that mercury does not excite a flow of bile; but here, the common sense of the profession, educated by experience, has refused to be led by physiological theory. Physiological theory, observing the effects of mercury on animals in health, has led to the partial abandonment of mercury in the cure of syphilis, because the drug in a healthy animal will produce disease of the bones. Whereas the experience of Lee, Langston Parker, to say nothing of Ricord and older writers, would recount numberless cases where syphilitic nodes have disappeared as if by charm under the use of the calomel vapor-bath or of mercury introduced in some other way. Physiological theory has asserted that because antiphlogistic treatment depresses and reduces vital and nervous power in health, therefore it must necessarily do so in disease—an assertion refuted by the experience of all clinical observers, not of the physiological school, since the time of Hippocrates.

"That the progress of physiological research may be of enormous use to practical medicine we most firmly believe, and for that reason we hope that, although the physiologists may separate themselves from the profession of medicine, the cultivators of medicine will never fail to watch narrowly the progress of physiology, and not only to forward but to apply it as far as in them lies. But physiological theory,

and much of so-called physiological experiment, are not physiological progress. Dr. Burdon-Sanderson hopes that education in physiology will tend to make the public more ready to take the advice of the doctor in the regulation of their life, and less credulous about the efficacy of drugs. In the sense in which Dr. Sanderson expressed this hope we most cordially join in it. But we must remind physiologists that all the knowledge that is necessary for the ordinary regulation of life may be summed up in a comparatively very small space. Modern physiological science has taught us little more than the necessity for pure air, water, and food, good clothing and shelter, moderation in eating and drinking, and the regulation of the passions—things, in fact, which are as old as the Pentateuch. If we go beyond these, we get into the domain of practical medicine. We may safely assert that all the experiments made on luckless animals since the time of Magendie to the present, in France, America, Germany, and England, have not prolonged one tithe of human life, or diminished one tithe of the human suffering, that have been prolonged and diminished by the discovery of Jesuits' bark and cod-liver oil. Until modern physiologists, therefore, can do more for modern physicians than they have lately accomplished, we cannot blame the latter if, in Dr. Sanderson's phrase, 'they rest on the more reliable teaching of experience, and are quite willing to do without us.'"

In this connection we also recall the remarks of Prof. H. J. Bigelow in his address before the Massachusetts Medical Society, June, 1871. Speaking of vivisection, he says:—

"How few facts of immediate considerable value to our race have of late years been extorted from the dreadful sufferings of dumb animals, the cold-blooded cruelties now more and more practised under the authority of science."—(*Med. Communications of the Mass. Med. Society*, p. 220, vol. xi., No. v., 1871.)

Yet we believe that neither of the authorities from whom we have quoted would undervalue the legitimate efforts of physiologists to establish the truth of their theories. They are needed, however, not only to originate discoveries, but to aid in establishing the true value of the remedies which practical medicine has empirically adopted; for neither "Jesuits' bark" nor "cod-liver oil" has fulfilled the extravagant hopes which heralded their introduction. Both clinical experience and physiological research have problems yet to solve regarding these two drugs, about which we think we already know so much, before our knowledge of them can be considered complete.

From British Journals.

Contagiousness of Phthisis.—In his Notes on Consumption, Richard Payne Cotton, M D. (*The Brit. Med. Journal*, Aug. 31, 1872), discusses the question of Consumption and Contagion.

He states that the Consumption Hospital of Brompton, with which he is connected, was opened in 1846 with ninety beds, which, ten years later, were increased to two hundred. These have been constantly occupied. During this long period, but one nurse has died of phthisis, and she was a poor creature, whose husband had deserted her, and who had long endured from other causes, also, much anxiety and physical exhaustion. The services of the nurses have generally been unusually prolonged, and their health, as a rule, remarkably good. Of those now resident two have served in the hospital seventeen years, one thirteen, &c. The two oldest nurses have recently died of old age and general decay, after having been long superannuated.

The gallery maids, engineer, dispensers and others all show a like record of freedom from phthisis. Of the staff of physicians and assistant-physicians—nineteen in number—only one has been affected with phthisis, and he was a young man of delicate and phthisical aspect.

The writer does not believe in the contagiousness of consumption, though he admits that cases now and then occur in which the disease has been developed in widowers or widows under circumstances apparently favoring the doctrine of contagion. The cases he has met have chiefly occurred among women. They do not, in the opinion of the author, support the theory of contagion. The union of husband and wife is not only a religious and social, but also a *physiological* one. It

has often been remarked, for example, that after a variable period of married intercourse, the one person is seen to resemble the other, not only in manner and habit, but in features and expression. The offspring, too, of second marriages have been often observed to resemble in feature and character the husband or wife of the previous union. If certain natural and healthy peculiarities can be imparted from husband to wife, or *vice versa*, there is every reason to believe that morbid diseases, peculiarities and tendencies may be equally imparted. There is another and less obscure way in which we may fairly conclude that phthisis may be conveyed from husband to wife. A phthisical father may communicate to the *fœtus in utero* a consumptive taint, which may thus be transmitted to the mother, just as we know is often the case with secondary syphilis. It may be due to such circumstances that phthisis arising apparently from contagion occurs more frequently in women than in men. Dr. Cotton believes, therefore, that in one or the other of these ways—either by transmission through offspring or by a mysterious and inexplicable connection between husband and wife—phthisis may sometimes be developed in either of them, and that we need not resort to zymotic influences in explanation of such an occurrence.

In view of the hospital statistics above referred to, Dr. Cotton asks, "Must it not appear to all believers in the doctrine of phthisis originating in a special and contagious poison, that a residence in the Consumption Hospital, and long-continued working in its wards, is a very good way, indeed, *not to catch the disease?*"

THE SWELLED LEG OF FEVERS.—Dr. J. Warburton Begbie *(Edinburgh Med. Jour.*, Sept., 1872) considers that these cases may be classified as follows:—1st, cases dependent on vascular obstruction: *a*, venous; *b*, lymphatic. 2d, cases in which inflammation of the areolar tissue exists.

Pain and swelling are the characteristic features of interrupted circulation through veins. When the convalescent from fever is either suddenly seized with pain in one of the lower extremities, or the limb becomes the seat of gradually augmenting uneasiness succeeded by swelling, together with enlargement of the superficial veins, there can be but little doubt that obstruction to the return of blood through a large vessel exists. The swelling, besides being confined to the limb, presents a very different appearance from ordinary anasarca; it does not pit on pressure, but is firm and has a brawny feeling. The color of the skin, except where the prominent veins exist, is not much changed from that of health. There is always more or less constitutional disturbance, chilliness and discomfort being present, and not unfrequently the local affection is preceded by well-marked rigors. Sometimes very alarming symptoms have occurred, implicating the heart itself. The author supposes these sudden and alarming seizures to be due to the fact that a portion of clot, originally obstructing the femoral or iliac vein on the affected side, has found its way to the right chambers of the heart, where it may be detained, or passing thence through the pulmonary artery may reach the lungs.

In cases due to an obstructed state of the lymphatics, Dr. Begbie has noticed a distinct enlargement of the lymphatic glands in the groin of the affected limb. Moreover, the limb, besides being swollen and firm, as in the phlegmasia due to venous obstruction, wants entirely the notable prominence of the superficial veins, and has hyaline lines in various parts—not unlike the marks over the abdomen which are observed in women who have borne children—which may be justly ascribed to dilated cutaneous lymphatic vessels.

The painless character of the swelled leg of fever when due to lymphatic obstruction is in striking contrast with the suffering of the patient when the venous system is involved. Dr. Begbie has never known the serious results of blood-poisoning, nor of embolism, nor of purulent deposits in remote parts to occur in the cases arising from lymphatic obstruction. Yet as cases occur in which both systems, venous and lymphatic, are involved, in such the prognosis must be guarded.

The cases of swelled leg in which an *inflammation of the areolar tissue exists* have been especially characterized by the affection of both legs; first one and then the other becoming swollen. The swelling sometimes commences in the foot or lower part of one leg, and then, gradually rising upward to the thigh, ultimately affects the thigh of the other limb and descends to the leg and foot. An inflammatory condition of the areolar tissue would best account for this peculiar progress. Sometimes in these cases the lymphatic system does not escape implication, and then superficial abscesses may form. Embolism and metastatic inflammation do not occur, and while purulent absorption may under some circumstances be induced, this occurrence need not be dreaded as a likely event.

From American Journals.

Compensation for Expert Testimony.—The *Western Lancet*, Aug. 1872, has an article which considers the relation which the physician, when summoned as a witness, sustains to the Court and to the parties on trial.

It regrets that some in the ranks of the regular profession are so willing to be summoned as witnesses, and to act the part of retainers for the party calling them. It often happens that what is wanted by lawyers in a case is, not the most intrinsically valuable opinion, but the one which most favors their side. So easily can professional men be obtained to testify on either side, that the community at large, as well as the members of a puzzled jury, are apt to regard the testimony as valueless.

All regular physicians, though experts in the eye of the law, so far as purely professional matters are concerned, are not really so in many cases. So wide is the domain of practical and scientific surgery and medicine that it is impossible for one average human intellect to become thoroughly acquainted with it. A great deal of the opprobrium which is cast upon medical experts in Court would cease to be merited, if the Judge would exercise his right of satisfying himself, before admitting an expert to testify, that he is really entitled to that character.

There is an indirect method by which the same result might, perhaps, to a certain extent, be reached, and which lies wholly within the power of the medical profession as a body. When summoned to testify in a court of law, the physician like any other citizen is bound, as an ordinary witness, to testify to matters of fact within his knowledge. But when he is examined as a *skilled witness*, his position is changed. His skill and knowledge acquired by study and observation are his own private property, and he cannot be compelled to place his skilled knowledge at the disposition of the State, without adequate compensation, any more than he can be compelled to practise his profession gratuitously for the benefit of the public. If all State and County Medical Societies were to make it *incumbent* upon their members to demand a fee for giving testimony as experts, and the fee were fixed at a high figure, there would not be so many physicians as now summoned to testify in a case, and only men of high standing in their special departments would be likely to be called upon, as attorneys would have to depend more upon the reputation and skill than upon the weight of numbers of the medical experts summoned.

Punishment, too, might be inflicted upon members by their societies, for failing to charge the fee agreed upon for giving an opinion in court.

The *Lancet* regards it as a matter which comes primarily within the cognizance of the American Medical Association; but in the absence of any direct action by it, the State and County Societies have the right, or rather owe themselves and the profession the duty, of making such regulations in the premises as justice and propriety demand.

Congenital Cyst of the Neck; or, the "Hygromatous Cyst" of Von Ammon.—Dr. Wm. R. McMahon *(Medical and Surgical Reporter*, July 27, 1872,) reports that he was called, Aug. 28, 1870, to a child four days old, and found a tumor which reached from the lower part of the lobule of the left ear to within half an inch of the right ear. This tumor, with the head in the erect posture, completely filled the space between the upper part of the sternum and chin, projecting about an inch in front of the chin. The skin covering the cyst was of normal color, with the exception of a few ramifications of small vessels.

Fluctuation was not detected, yet the growth was semi-translucent. The introduction of an exploring needle showed that its anterior wall was only covered by the integument, superficial fascia and platysmyoides. From the puncture oozed a limpid serum.

Active interference was postponed until the child should become stronger. A month later the cyst was larger, and respiration was imperfectly performed. The skin covering the cyst was now of a bluish tint, but there was no œdema of the head or face. Regarding active measures as yet premature, Dr. McMahon made an incision at the most pendant part, in order to palliate the symptoms. This procedure was successful.

November 20th, the cyst was found to be larger than at any previous visit. Deglutition and respiration were seriously impaired, and there were symptoms of passive congestion of the head and face. The condition of the patient demanded, if possible, a radical cure, for which a seton composed of two strands of silk was passed from one extremity of the cyst to the other. For the first forty-eight hours a serous fluid escaped from the exit and entrance of the needle, which so reduced the size of the cyst that there seemed to be nothing remaining but a redundancy of tissue.

On the third day there seemed to be no inflammatory action, so the seton was saturated with tincture of iodine, and drawn

through the cyst. This was repeated daily for ten days, at the end of which time there was quite a purulent discharge, and sufficient inflammation to demand the withdrawal of the seton. External pressure was employed from the time of the introduction of the seton until the close of treatment. When suppuration and all inflammatory action had ceased, the only mark left to designate the site of this formidable cyst, was a slight redundancy of tissue. During treatment there was scarcely any febrile excitement or constitutional disturbance.

Correspondence.

MESSRS. EDITORS:—At the present time, the following item, translated from the *Archives Générales de Médecine* for September, may not be without interest.

Academy of Medicine, meeting of July 23d, M. Léon Cohn, professor at Val-de-Grace, read a note on the isolation and treatment in special hospitals, of patients afflicted with smallpox. The author showed that the isolation of smallpox patients in special hospitals, is an imperative necessity at the present time, as a law of public hygiene.

Having had charge, during the siege of Paris, of the medical service of the hospital of Bicêtre, to which there were admitted nearly 8000 cases of smallpox, he had an opportunity to observe that such crowding together of patients affected with this disease was not attended by the inconveniences which one might expect, either in the case of the sick, among whom the mortality was not greater than elsewhere, or of the medical staff and attendants. A single attendant only, out of nearly two hundred, was carried off by the epidemic.

With regard to the population in the neighborhood of the hospital, the proximity of such a number of smallpox patients was undoubtedly a source of infection to the troops in barracks near by, who kept up a free communication with the general office in the centre of the hospital. The marines, however, stationed in the fort of Bicêtre, who had no communication with this office, were not attacked in greater numbers than the other marines in garrison in the different forts about Paris; showing that the contagion of smallpox is not easily diffused and transported by the atmosphere.

As a conclusion, M. Cohn proposes to build cheap smallpox hospitals in a circle outside of the fortifications, which can be burnt to destroy the miasm, after a certain time.

Boston, Oct. 1, 1872. S. L. A.

BOSTON DISPENSARY.—The following are the statistics of this institution for the year ending Sept. 30th, 1872. The number of new patients at the Central Office is 16,289, of which 11,471 are medical cases, and 4818 surgical, classified as follows:—

MEDICAL.

	Men.	*Women.*	*Children.*	*Total.*
1st quarter,	678	791	763	2232
2d "	989	863	693	2545
3d "	885	1520	864	3269
4th "	782	1488	1155	3425
Total,	3334	4662	3475	11,471

SURGICAL.

1st quarter,	386	265	271	922
2d "	445	329	416	1190
3d "	496	372	476	1344
4th "	575	387	400	1362
Total,	1902	1353	1563	4818

The number of new patients in the Districts is as follows:—

	Men.	*Women.*	*Children.*	*Total.*
1st quarter,	345	752	849	1946
2d "	509	990	1056	2555
3d "	463	978	935	2376
4th "	406	924	1093	2423
Total,	1723	3644	3933	9300

RESULTS.

Discharged, cured or relieved,	8411
Sent to Hospitals, or removed from Districts,	568
Died,	350
Under treatment,	94
	9423
Under treatment at last annual report,	123
	9,300
Number of cases at Central Office,	16,289
Total number at Central Office & in Districts,	25,589

PATIENTS, NEW AND OLD, AT CENTRAL OFFICE.

	Medical.	*Surgical.*	*Total.*
1st quarter,	4039	1636	5675
2d "	5911	2085	7996
3d "	7178	2580	9758
4th "	6554	2020	8574
Total,	23,682	8321	32,003

Number of cases of midwifery,	110
Number of recipes,	47,727
Number of recipes since July, 1856,	705,012
Number of patients since July, 1856,	335,821
Average daily attendance,	104

SURGEONS.

John Homans, M.D. Samuel W. Langmaid, M.D.
J. B. Treadwell, M.D. Francis B. Greenough, M.D.
OPHTHALMIC SURGEON—Oliver F. Wadsworth, M.D.

PHYSICIANS.

J. McLean Hayward, M.D. Robert Disbrow, M.D.
Frederic I. Knight, M.D. Thos. Waterman, Jr. M.D.
Wm. F. Munroe, M.D. Henry Tuck, M.D.
Charles E. Inches, M.D. Alfred L. Haskins, M.D.
J. Franklin Appell, M.D. W. H. H. Hastings, M.D.
Henry H. A. Beach, M.D. Wm. L. Richardson, M.D.

DISTRICT PHYSICIANS.

No. 1.—Charles P. Putnam, M.D.
No. 2.—John B. Fulton, M.D. (East Boston.)
No. 3.—Prince W. Page, M.D.
No. 4.—William J. Morton, M.D.
No. 5.—Josiah L. Hale, M.D.
No. 6.—Reginald H. Fitz, M.D.
No. 7.—Bennett F. Davenport, M.D.
No. 8.—Charles B. Belt, M.D. (South Boston.)

Eugene A. Gilman, M.D., Apothecary; Henry C. Durkee, Assistant Apothecary; Richard C. Brandt, Second Assistant Apothecary.

SAMUEL A. GREEN, M.D., *Superintendent.*

Medical Miscellany.

Dr. Anson P. Hooker, of East Cambridge, has been appointed Assistant Surgeon General of Massachusetts, by His Excellency, Gov. Washburn.

The College of Physicians and Surgeons of Syracuse University opened on the 3d instant, with a full corps of eighteen Professors.

The corner stone of the Buffalo Insane Asylum was laid September 18th, with appropriate ceremonies.

Dr. Moreau Morris has resigned the position of City Sanitary Inspector of the Health Department of New York.

Our able contemporary, *The Philadelphia Medical Times*, enters on its third year of publication on the first of October. It will, in future, be issued weekly, instead of twice a month as before. The price of the journal will be raised from four to five dollars.

Publications of the Mass. Med. Society.—The attention of our readers is called to the advertisement of the sale of the past numbers of the Publications of the State Medical Society. An opportunity is thus given to procure many very valuable contributions to medical science at a merely nominal price.

The British papers report the case of a Miss Hough, æt. 55, who died a quarter of an hour after being stung by a bee. The deceased was in her garden inspecting her bees when she suddenly called to the gardener that she had been stung. The gardener, on coming to her, removed a bee from her hair. She became unconscious, and died in a quarter of an hour. The body was examined, but the only lesion was a good deal of discoloration behind the ear around the sting. The physician who made the autopsy said there was but one sting, and that he thought death was caused by shock to the nervous system. Her brother stated that the deceased, in 1870, was stung by a bee, and that she became unconscious and remained so for two hours. The jury returned a verdict of "Death from Syncope, accelerated by the Sting of a Bee."

Elixir of Pepsin and Bismuth.—Emil Scheffer has shown by a series of experiments, reported in the *American Journal of Pharmacy* for August, that pepsin is precipitated from its solutions by the salts of bismuth, and that the elixirs of pepsin and bismuth, which are offered by several manufacturers, must owe any efficiency they possess to the alcohol and bismuth they contain.

Preservation of Meat and Vegetables.—At a recent meeting of the Academy of Sciences, M. Sacca showed specimens of meat and vegetables preserved by the aid of acetate of soda. The proportion which he recommends is two pounds of acetate of soda for eight pounds of meat or vegetable. To render the substances so preserved eatable, they must be treated with hydro-chlorate of ammonia. Acetate of ammonia is then formed, which is "easily washed out," and common salt, which serves as a condiment. Max Schultze, of Berlin, long since recommended the use of the alkaline acetate for the preservation of microscopical specimens, but no one was expected to eat them afterwards.

On the Pigments of Bile and Urine.—Jaffe (*Arch. Pharm.* (2), cxlv., 148) finds that, when bile is exhausted by hydrochloric acid, a pigment is obtained which is probably identical with the normal urinary pigment, as they both present the same spectra, and give the same reactions. The urinary pigment is not so easily decomposed as is generally imagined, for its spectrum was not destroyed by boiling with dilute mineral acids or alkalies; nor was it altered in urine which had stood for a week and was quite mouldy, though not putrid. The paper contains, also, a new method for obtaining pigment from bile.

Books Received.—General and Differential Diagnosis of Ovarian Tumors, with especial reference to the Operation of Ovariotomy. By Washington L. Atlee, M.D. Philadelphia: J. B. Lippincott & Co. 1873. Pp. 482. (From James Campbell.)

Errata.—On page 211, second column, line 43, for "prevents" read *permits*. Page 243, 12th line from bottom of 1st column, for "thirty" read *three*. On page 247 of this number, 3d line from bottom of 1st column, for "rescue" read *secure*.

Deaths in fifteen Cities and Towns of Massachusetts, for the week ending Sept. 28, 1872.

Cities and Towns.	*No. of Deaths.*
Boston	147
Charlestown	17
Worcester	26
Lowell	29
Milford	10
Chelsea	9
Cambridge	14
Salem	12
Lawrence	19
Lynn	20
Fitchburg	3
Newburyport	2
Somerville	9
Haverhill	6
Holyoke	4
	327

Prevalent Diseases.	
Consumption	55
Cholera Infantum	47
Typhoid Fever	24

There were eighteen deaths from smallpox in Boston and one in Charlestown.

George Derby, M.D.,
Secretary of State Board of Health.

Deaths in Boston for the week ending Saturday, October 5th, 141. Males, 74; females, 67. Accident, 5—abscess, 1—apoplexy, 2—inflammation of the bowels, 2—bronchitis, 2—inflammation of the brain, 2—congestion of the brain, 1—disease of the brain, 3—cyanosis, 1—cancer, 1—cholera infantum, 8—cholera morbus, 1—consumption, 25—convulsions, 4—croup, 1—debility, 1—diarrhœa, 4—dropsy of brain, 1—diabetes, 1—dysentery, 1—dyspepsia, 1—erysipelas, 1—scarlet fever, 2—typhoid fever, 9—fever, 1—disease of the heart, 7—hæmorrhage, 1—homicide, 1—disease of the kidneys, 3—laryngitis, 1—disease of the liver, 2—congestion of the lungs, 1—inflammation of the lungs, 5—marasmus, 4—osteomalacia, 1—old age, 4—paralysis, 2—premature birth, 1—peritonitis, 1—rheumatism, 1—syphilis, 1—smallpox, 17—tetanus, 1—unknown, 4.

Under 5 years of age, 43—between 5 and 20 years, 21—between 20 and 40 years, 32—between 40 and 60 years, 24—above 60 years, 21. Born in the United States, 86—Ireland, 28—other places, 27.